



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/989,242

11/21/2001

Yujiro Kajihara

501.32049RV2

9603

20457

7590

04/01/2004

ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-9889

EXAMINER

CLARK, JASMINE JHIHAN B

ART UNIT

PAPER NUMBER

2815

DATE MAILED: 04/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/989,242

Applicant(s)

KAJIHARA ET AL.

Examiner

Jasmine Clark

Art Unit

2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendmnet B filed 08/28/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) 15-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 37-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Since, the Applicants have already received the action on the merits for originally presented invention (see parent cases 08/038,684 and 08/311,021), this invention has been constructively elected by original presentation for prosecution on the merits.

Accordingly claims 15-36 **remain** withdrawn from consideration as being considered to non elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Applicants traverse the restriction requirement. The traversal is on the ground(s) that (from pages 30-32) "As traversal, Applicant notes that 35 USC § 121, the basis for a restriction and election of species requirement, provides for a restriction only if two or more independent and distinct inventions are claimed in one application. While §802.01 of the MPEP indicates that restriction and/or election of species may be permissible between independent or distinct inventions, such section of the MPEP is clearly erroneous in view of the plain and unambiguous language of 35 USC § 121....". This is not found persuasive because of the above reasons and the reasons for inquiring upon restriction as stated in MPEP 808 have been clearly met.

In pages 31-32, Applicants argued that "...based upon the same basic inventive concept, ... that the designated inventions are not independent and distinct to the extent required .. , such claims cannot be considered as rendering respective embodiments independent and distinct to the extent required by 35 USC § 121..." This argument is not persuasive. Because the device can be made without going through the step of making the device, eg., a heat stage, and/or the step of bending the lead suspension

Art Unit: 2815

leads, which, as above, clearly constitutes the inventions that are independent and are distinct.

The requirement is still deemed proper and is therefore made FINAL.

Improper Amendment to Reissue

2. Claims 1, 6, 11, 13, and 14 are not properly amended. A paper correctly amending the reissue is required.

Amendment to the claims may only be made as set forth in 37 CFR 1.173(b)(2), as follows:

- a. Original patent claims must not be renumbered. 37 CFR 1.173(e).
- b. Claims added to the patent must follow the number of the highest numbered patent claim (37 CFR 1.173(e) and must be underlined in their entirety (37 CFR 1.173(d)).
- c. A claim (original or new) may be deleted by a statement requesting the deletion of a specified claim without presentation of the text of such claim. 37 CFR 1.173(b)(2).
- d. Any change to the text of a claim (original or new) must be presented as an entire numbered claim. All subject matter being added to an original patent claim must be underlined. All subject matter being deleted from an original patent claim must be placed between brackets. 37 CFR 1.173(b)(2) and (d). Subject matter being added to a new claim requires rewriting (and underlining) of the entire new claim.

Art Unit: 2815

Defective Reissue Oath

3. The reissue oath/declaration filed with this application is defective because it fails to contain the statement required under 37 CFR 1.175(a)(1) as to applicant's belief that the original patent is wholly or partly inoperative or invalid. See 37 CFR 1.175(a)(1) and see MPEP § 1414.

i) Note that the withdrawal of claims to the method of manufacturing a semiconductor device causes the reissue Oath to be defective. The error being corrected is no longer at issue.

ii) The oath or declaration must identify at least one error being relied upon as a basis for the reissue (37 CFR 1.175(a)(1)). For example, "failure to include the following claims in the original patent..." is not an acceptable statement of an error. Specific changes or amendment to the claims must be identified. If new claims are presented, their differences from the original claims must be pointed out. See MPEP 1414.

iii) For any error corrected, claims 1, 6, 11, 13, and 14, which is not covered by an oath or declaration, i.e., any error after the filing of the declaration currently in the reissue application, Applicants MUST submit a supplemental oath or declaration prior to allowance starting "[T]hat every such error arose without an deceptive intention on the part of the applicant" (37 CFR 1.175(b)(1)), or language equivalent thereto. See MPEP 1444 for handling supplemental.

Rejection, Defective Reissue Oath

Art Unit: 2815

4. In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175(b)(1) must be received before this reissue application can be allowed.

Claims 1-14, and 37-59 are rejected as being based upon a defective reissue oath/declaration under 35 U.S.C. 251. See 37 CFR 1.175. The nature of the defect is set forth above.

Receipt of an appropriate supplemental oath/declaration under 37 CFR 1.175(b)(1) will overcome this rejection under 35 U.S.C. 251. (Please see MPEP 1414). An example of acceptable language to be used in the supplemental oath/declaration is as follows:

"Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the applicant."

Claim Rejections – 35 USC§251, Recapture

5. Claims 37-59 are rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Pannu v. Storz Instruments Inc.*, 258 F.3d 1366, 59 USPQ2d 1597 (Fed. Cir. 2001); *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant

Art Unit: 2815

previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

Please see the previous Office action in case 09/328,910..

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2815

Claims 37-39 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Frechette et al. (US 4,868,638), Applicants' submitted prior art in view of Hagiwara et al. (JP 64-076745).

Concerning claim 37, Frechette et al teach substantially all structure and features as the claimed invention, but fail to teach including an insulating tape which adhered to at least the plurality of leads and the suspension leads. While a resin member sealing the semiconductor chip is not shown, it is inherently present or certainly would have been obvious to employ in the semiconductor chip environment, as is notoriously well known. Hagiwara et al teach a semiconductor device including an insulating tape 5 which adhered to a plurality of leads and suspension leads 3 (see Figs. 3 and 7-8), wherein the insulating tape has a frame shape and is continuously formed between the suspension leads and the plurality of leads. Hence, it would have been obvious to one having ordinary skill in the art at the time the invention was made for Frechette et al to apply the insulating tape, as notoriously well known.

Concerning claim 38, wherein the suspension leads extend from the chip mounting portion toward four corners of the resin member, and wherein the plurality of leads are arranged between the suspension leads in plane view, please see Frechette in Fig. 5, for example. However, the applied reference fail to teach and/or suggest wherein the resin member has a rectangular shape. Hence, it would have been obvious to have the rectangular shape for the resin member, since such a modification would have involved a mere change in the form/shape/size of a component. A change in

Art Unit: 2815

for/shape/size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Concerning claim 39, wherein the insulating tape extends along four sides of the resin member to surround the chip mounting portion and the semiconductor chip in a plane view, please see the above discussion and see Hagiwara in Figs. 1-3, for example.

Response to Arguments/Amendment B

7. Applicant's amendment and arguments filed 08/28/03 have been fully considered.

Concerning the arguments on pages 30-33 regarding the restriction, please see the examiner's response in paragraph 1 above.

In page 34, Applicants argued that "Frechette et al do not teach important features of the claimed invention, e.g. a resin member or insulating tape. Further JP 64-076745) does not combine with Frechette et al to teach important features of the claimed invention.." The examiner disagrees with the applicants' arguments. As discussed above the resin member is inherent in the art (please see the above discussion). Applicants' argument is not persuasive since the secondary reference, Hagiwara et al disclose the insulating tape formed continuously between the leads and the suspension leads which is notoriously known in the art. Therefore, it is permissive to combine Frechette et al with Hagiwara et al's structure. It is the combination that meets the claim limitations. No matter the fact that each reference by itself does not teach the

claimed invention, it is the combination that is used in the rejection. It is the combination that teach the claimed invention.

Telephone Inquiry Contacts

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasmine J Clark whose telephone number is (571) 272-1726. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (571) 272-1664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jjbc/03/24/04

**JASMINE CLARK
PRIMARY EXAMINER**
